

<b>Examiner-Initiated Interview Summary</b>	Application No. 10/707,433	Applicant(s) PETERS, ROBERT D.
	Examiner Tiffany A. Fetzner	Art Unit 2859

All Participants:

Status of Application: After-final before Appeal

(1) Ex. Tiffany A. Fetzner.

(3) \_\_\_\_\_.

(2) Attorney J. Mark Wilkinson Reg. no. 48,865.

(4) \_\_\_\_\_.

Date of Interview: 1 November 2005

Time: 4:45pm

Type of Interview:

Telephonic  
 Video Conference  
 Personal (Copy given to:  Applicant  Applicant's representative)

Exhibit Shown or Demonstrated:  Yes  No

If Yes, provide a brief description:

**Part I.**

Rejection(s) discussed:

*None*

Claims discussed:

*Claim 1*

Prior art documents discussed:

*None*

**Part II.**

SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:

See Continuation Sheet

**Part III.**

It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.  
 It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.



Diego Gutierrez  
Supervisory Patent Examiner  
Technology Center 2800

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)

Continuation of Substance of Interview including description of the general nature of what was discussed: The examiner contacted applicant's representative, after receiving applicant's October 20th 2005 after-final response because it was evident that applicant's broad claim 1, was causing a scope of the claims, interpretation problem. Applicant's arguments of the October 20th 2005 response all center around the fact that the art applied in the September 28th 2005 final office action is in applicant's words "not a post acquisition" correction, but a "pre-data collection technique" which is corrected. The examiner noted in the interview that applicant seems to have overlooked the examiner's position that applicant's claim 1 fails to state, or require "post acquisition k-space data correction". A method claim is not restricted to having the steps of the method occur in the order listed, and there is nothing in claim 1 recited which indicates that the correction of the "acquired k-space data" occurs after the termination of the entire FSE sequence. The examiner also noted to applicant that an amendment clarifying this feature would also represent a change in scope of the finally rejected claims, and that the examiner would have to perform a new search of the prior art, since the claim would then correct the FSE sequence after the entire sequence was collected / acquired, as opposed to having the "acquired k-space data corrected for amplitude modulation effects 'in' the fast spin echo pulse sequence".

The examiner was unable to resolve the problems over "what was claimed" versus "what is argued by applicant" with applicant's representative during the interview, and although the examiner did offer to perform an updated search, based on the argued limitations, and based on the results notify applicant a) if an examiner's amendment could move the application toward allowance; or b) whether the presence of additional prior art would require extensive further consideration of the new claim scope by the examiner; applicant refused the examiner's offer of assistance. The applicant's representative simply insisted that the claims were "patentable as is" and that the claims were already clear that the "correcting the acquired k-space data for amplitude modulation effects "in" the fast spin echo sequence" was necessarily performed after the FSE sequence, in the finally rejected claims as currently recited and that the examiner's position that the claim broadly also included the scope of "correcting the acquired k-space data for amplitude modulation effects "in the fast spin echo pulse sequence" dependent upon the first limitation (i.e. of "acquiring k-space data from multiple echoes in an echo train with a fast spin echo sequence"), with a / the correction of each acquired k-space data occurring after it is performed, while the FSE sequence was ongoing was "implausible nonsense", since the correction had to occur "after the k-space data acquisition".

The examiner tried unsuccessfully to explain that the finally rejected claim 1 'as written' was not restricted to just post acquisition, because of the phrase "in the fast spin echo pulse sequence" from the second limitation of claim 1, but applicant's representative remained unable to see the problem of failing to state that the correction step occurs after the FSE sequence is complete, and not intermittently while the FSE sequence is being conducted. Based on the failure to resolve this "scope of the claims" issue. The examiner is providing applicant with an advisory action.

If applicant wishes to work with the examiner, the offer of the examiner to assist applicant remains. Applicant is invited to make a second after-final amendment, for the examiner to consider, since the main problem seems to be that applicant's claims are broader than applicant's arguments and clarifying the claims to include correction after the FSE sequence has been completely executed would remove the Le Roux article, from being applied as prior art. The examiner also notes however that a further updated search would be necessary, due to the change of the scope of the claims and that patentability would be determined based on the results of the examiner's updated search, since there are known MRI post acquisition methods for correcting amplitude and phase errors which result from fast MRI imaging sequences including FSE sequences.

Two examples of the known post processing MR methods which are directed to removing phase and amplitude inconsistency in FSE acquired MR data, based on k-space acquisition are the Liu et al., patents 6,424,153 and 6,043,654. Noted because of their titles, and abstracts. These references have not yet been considered by the examiner on the merits, they are noted because applicant requested in the telephonic interview that the examiner provide proof that the amendment by applicant of the claims to include "post FSE acquisition processing" would make other prior arts relevant, since applicant believes the current scope is clear and that the scope would remain unchanged. Therefore the examiner has responded to applicant's request. However applicant is advised that a full updated post-acquisition FSE k-space correction of amplitude modulations has not yet been performed by the examiner, and will need to be, should applicant decide to amend the claims to overcome the LeRoux article.